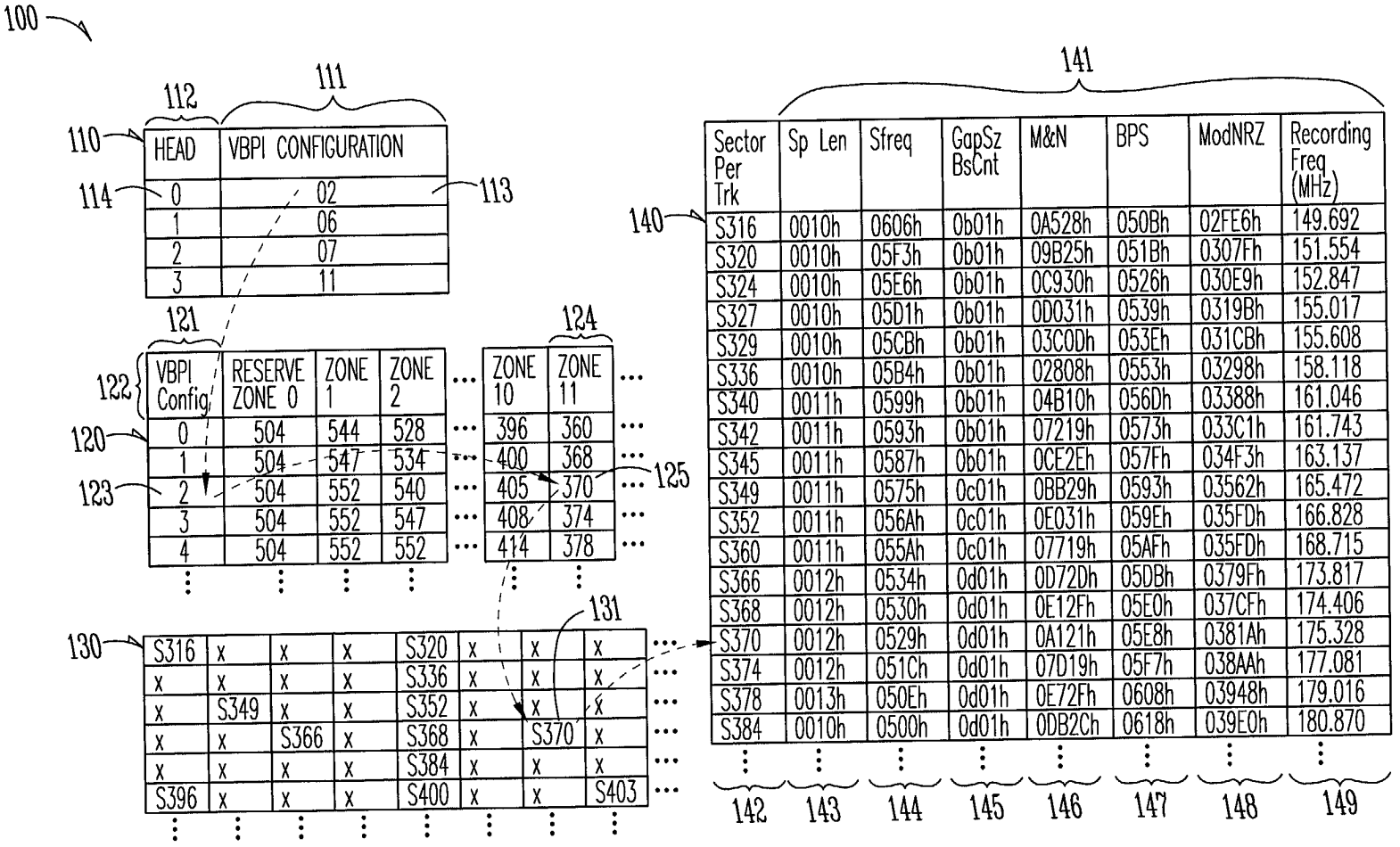

Fig. 1
(Prior Art)

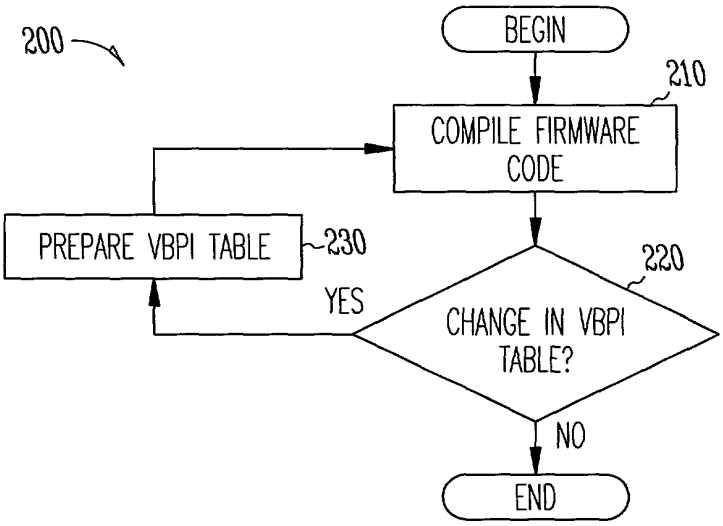

Fig. 2
(Prior Art)

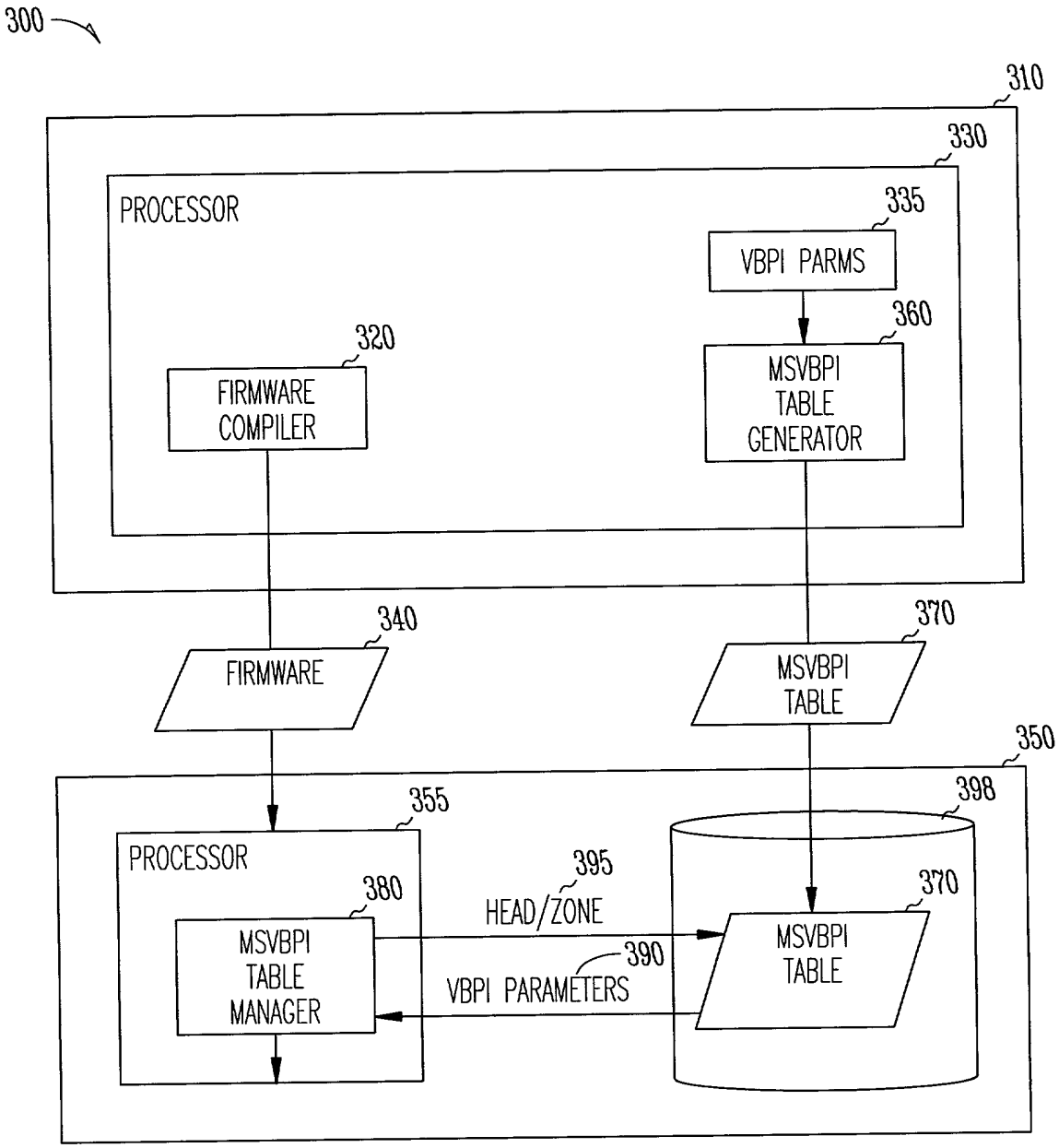
300
310
330
PROCESSOR
335
VBPI PARMS
360
320
FIRMWARE COMPILER
MSVBPI TABLE GENERATOR
340
370
FIRMWARE
MSVBPI TABLE
350
355
398
PROCESSOR
395
HEAD/ZONE
380
370
MSVBPI TABLE MANAGER
390
VBPI PARAMETERS
MSVBPI TABLE

Fig. 3

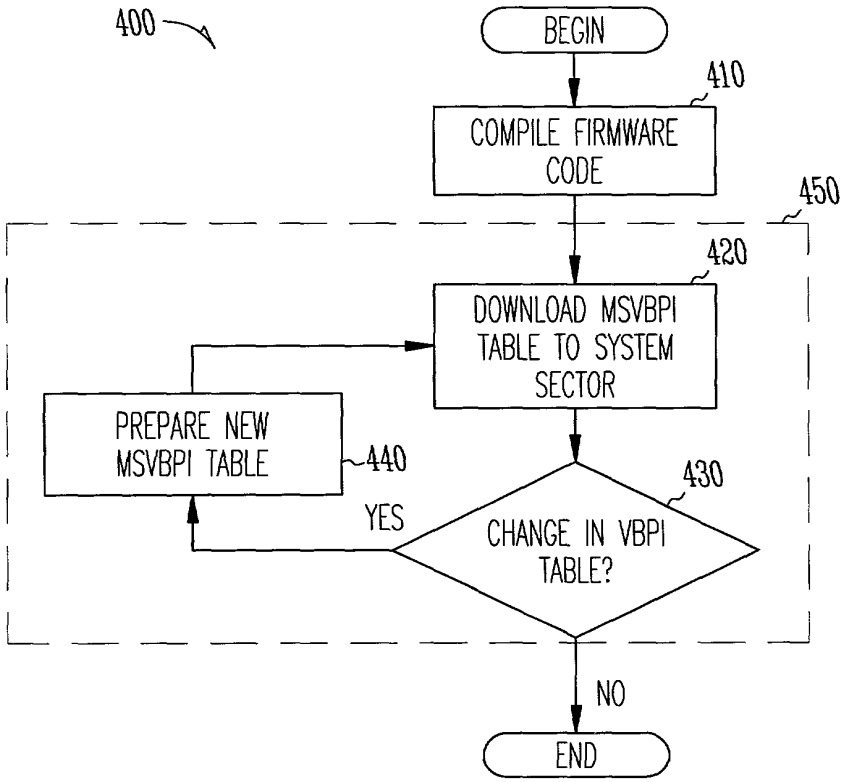
400
BEGIN
410
COMPILE FIRMWARE CODE
450
420
DOWNLOAD MSVBPI TABLE TO SYSTEM SECTOR
PREPARE NEW MSVBPI TABLE
440
430
YES
CHANGE IN VBPI TABLE?
NO
END

Fig. 4

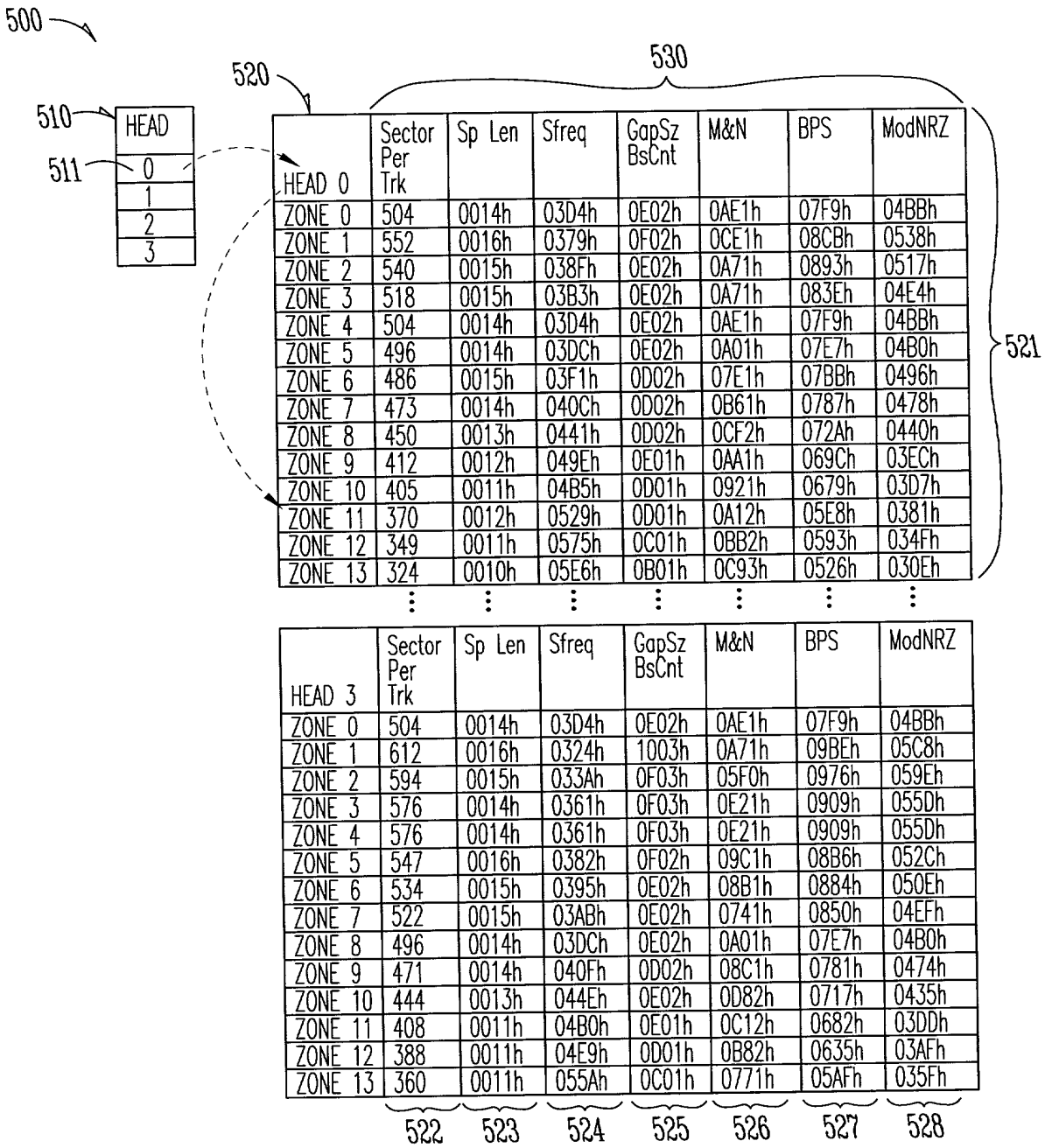
500
510
HEAD
511
0
1
2
3
520
530
521
HEAD 0
Sector Per Trk
Sp Len
Sfreq
GapSz BsCnt
M&N
BPS
ModNRZ
ZONE 0 504 0014h 03D4h 0E02h 0AE1h 07F9h 04BBh
ZONE 1 552 0016h 0379h 0F02h 0CE1h 08CBh 0538h
ZONE 2 540 0015h 038Fh 0E02h 0A71h 0893h 0517h
ZONE 3 518 0015h 03B3h 0E02h 0A71h 083Eh 04E4h
ZONE 4 504 0014h 03D4h 0E02h 0AE1h 07F9h 04BBh
ZONE 5 496 0014h 03DCh 0E02h 0A01h 07E7h 04B0h
ZONE 6 486 0015h 03F1h 0D02h 07E1h 07BBh 0496h
ZONE 7 473 0014h 040Ch 0D02h 0B61h 0787h 0478h
ZONE 8 450 0013h 0441h 0D02h 0CF2h 072Ah 0440h
ZONE 9 412 0012h 049Eh 0E01h 0AA1h 069Ch 03ECh
ZONE 10 405 0011h 04B5h 0D01h 0921h 0679h 03D7h
ZONE 11 370 0012h 0529h 0D01h 0A12h 05E8h 0381h
ZONE 12 349 0011h 0575h 0C01h 0BB2h 0593h 034Fh
ZONE 13 324 0010h 05E6h 0B01h 0C93h 0526h 030Eh
HEAD 3
Sector Per Trk
Sp Len
Sfreq
GapSz BsCnt
M&N
BPS
ModNRZ
ZONE 0 504 0014h 03D4h 0E02h 0AE1h 07F9h 04BBh
ZONE 1 612 0016h 0324h 1003h 0A71h 09BEh 05C8h
ZONE 2 594 0015h 033Ah 0F03h 05F0h 0976h 059Eh
ZONE 3 576 0014h 0361h 0F03h 0E21h 0909h 055Dh
ZONE 4 576 0014h 0361h 0F03h 0E21h 0909h 055Dh
ZONE 5 547 0016h 0382h 0F02h 09C1h 08B6h 052Ch
ZONE 6 534 0015h 0395h 0E02h 08B1h 0884h 050Eh
ZONE 7 522 0015h 03ABh 0E02h 0741h 0850h 04EFh
ZONE 8 496 0014h 03DCh 0E02h 0A01h 07E7h 04B0h
ZONE 9 471 0014h 040Fh 0D02h 08C1h 0781h 0474h
ZONE 10 444 0013h 044Eh 0E02h 0D82h 0717h 0435h
ZONE 11 408 0011h 04B0h 0E01h 0C12h 0682h 03DDh
ZONE 12 388 0011h 04E9h 0D01h 0B82h 0635h 03AFh
ZONE 13 360 0011h 055Ah 0C01h 0771h 05AFh 035Fh
522
523
524
525
526
527
528

Fig. 5

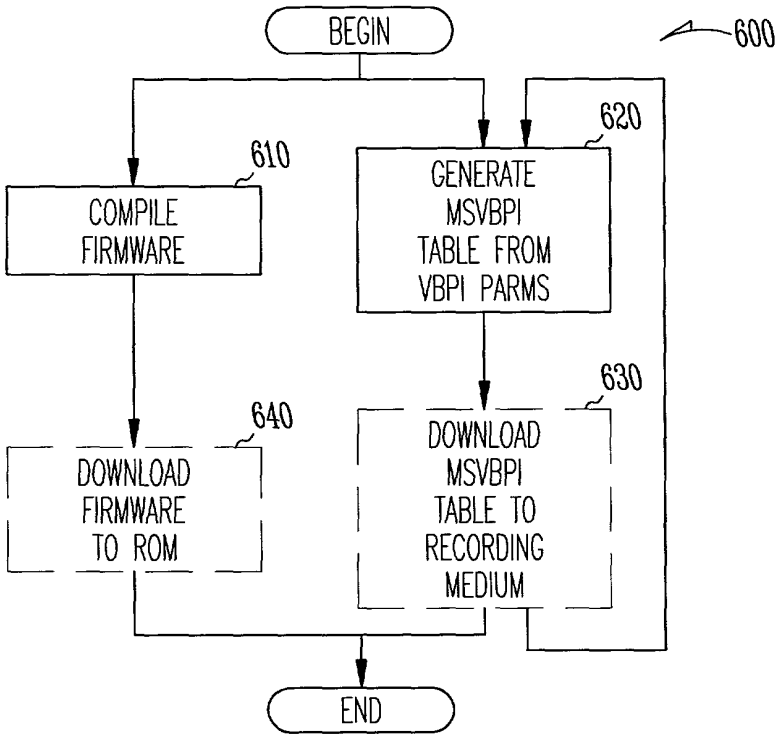
BEGIN
600
610
COMPILE FIRMWARE
620
GENERATE MSVBPI TABLE FROM VBPI PARMS
640
DOWNLOAD FIRMWARE TO ROM
630
DOWNLOAD MSVBPI TABLE TO RECORDING MEDIUM
END

Fig. 6

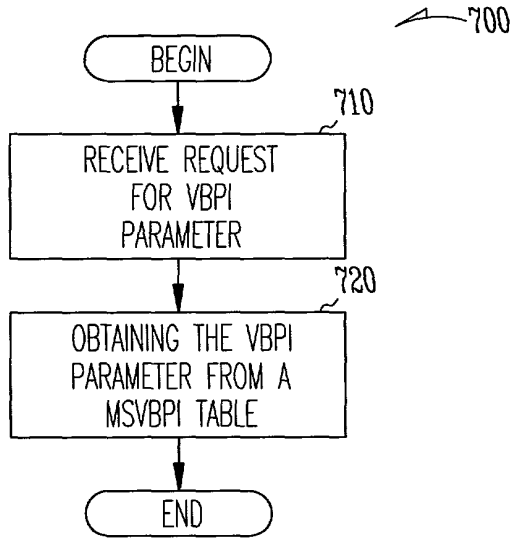
700
BEGIN
710
RECEIVE REQUEST FOR VBPI PARAMETER
720
OBTAINING THE VBPI PARAMETER FROM A MSVBPI TABLE
END

Fig. 7

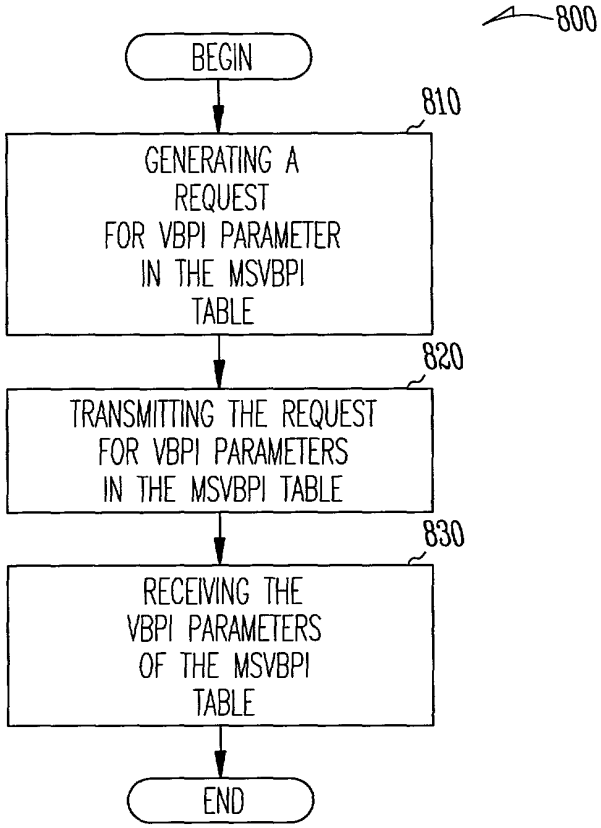
800
BEGIN
810
GENERATING A REQUEST FOR VBPI PARAMETER IN THE MSVBPI TABLE
820
TRANSMITTING THE REQUEST FOR VBPI PARAMETERS IN THE MSVBPI TABLE
830
RECEIVING THE VBPI PARAMETERS OF THE MSVBPI TABLE
END

Fig. 8

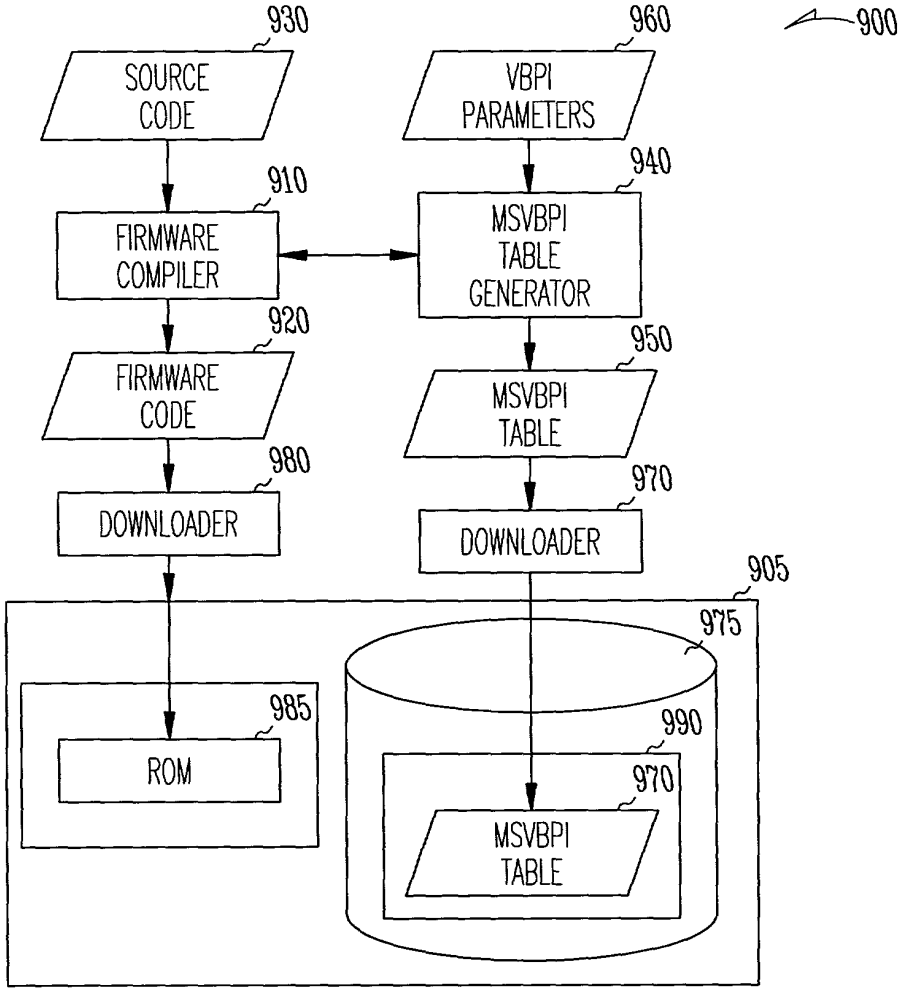
900
930
SOURCE CODE
960
VBPI PARAMETERS
910
FIRMWARE COMPILER
940
MSVBPI TABLE GENERATOR
920
FIRMWARE CODE
950
MSVBPI TABLE
980
DOWNLOADER
970
DOWNLOADER
905
975
985
ROM
990
970
MSVBPI TABLE

Fig. 9

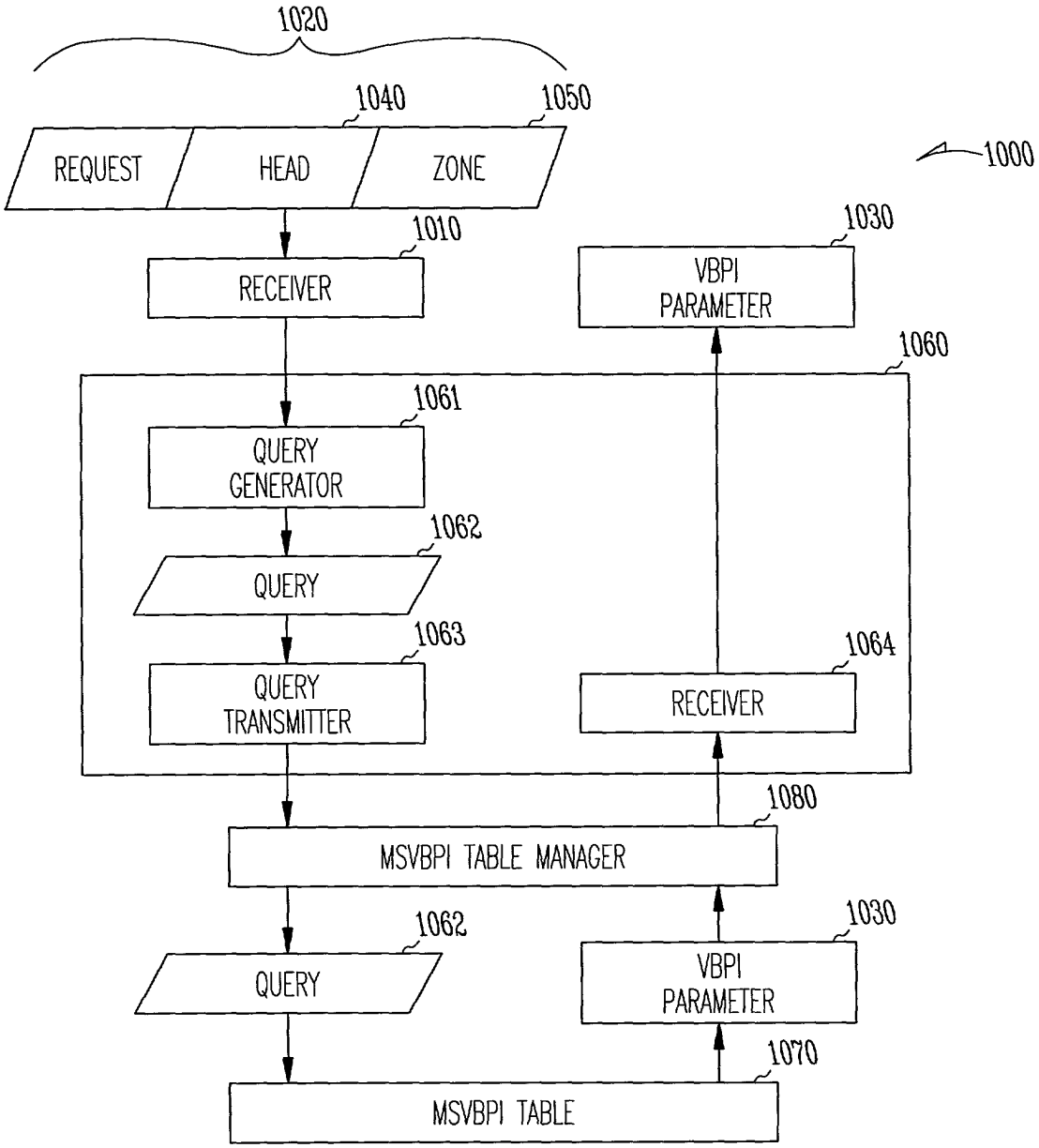
1020
1040
1050
REQUEST
HEAD
ZONE
1000
1010
RECEIVER
1030
VBPI PARAMETER
1060
1061
QUERY GENERATOR
1062
QUERY
1063
QUERY TRANSMITTER
1064
RECEIVER
1080
MSVBPI TABLE MANAGER
1062
QUERY
1030
VBPI PARAMETER
1070
MSVBPI TABLE

Fig. 10

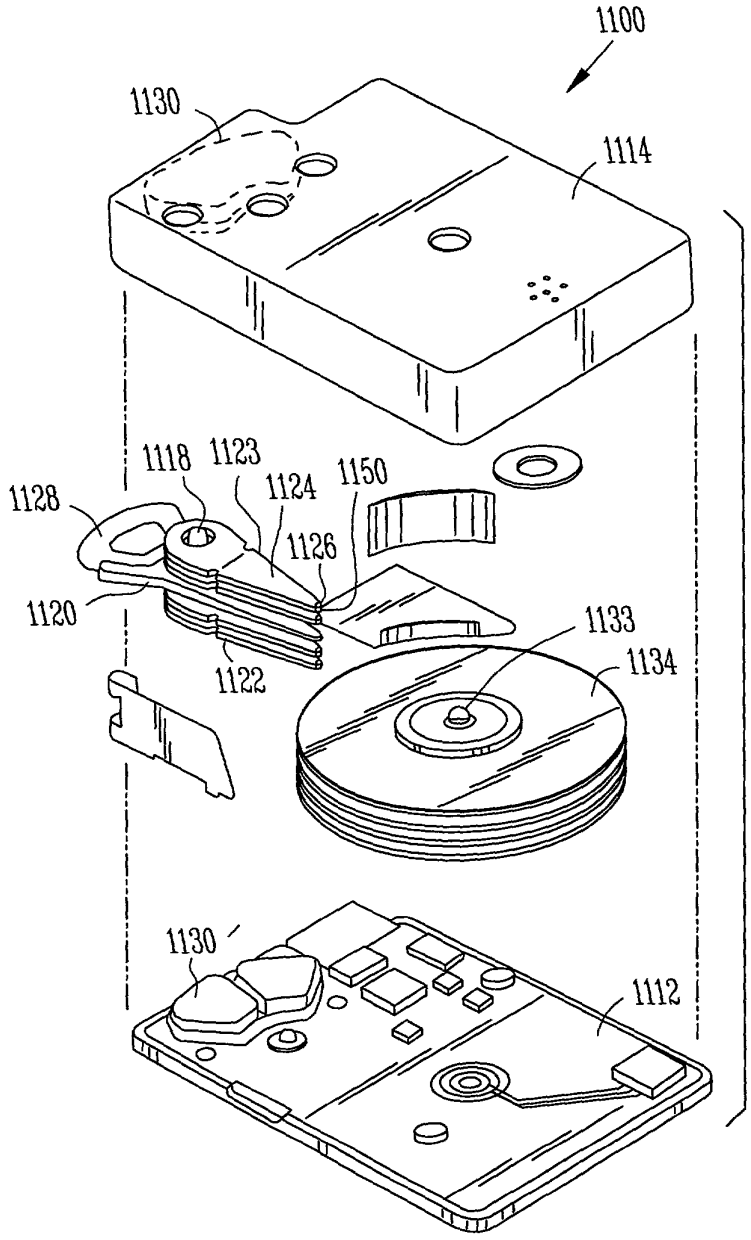
1100
1130
1114
1118
1123
1124
1150
1128
1126
1120
1133
1134
1122
1130
1112

Fig. 11

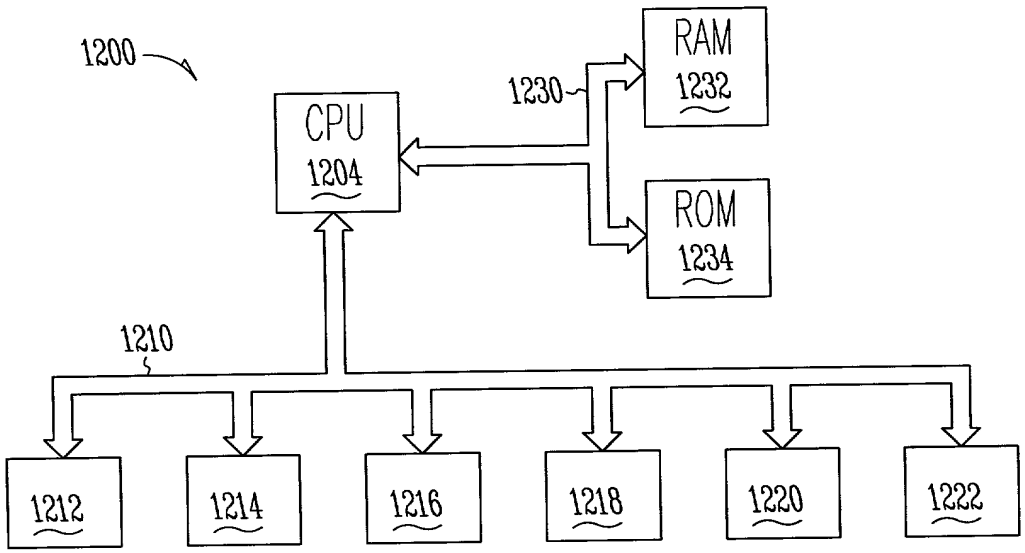
1200
RAM
1232
1230
CPU
1204
ROM
1234
1210
1212
1214
1216
1218
1220
1222

Fig. 12